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TB CARE I

TB CARE I - Cambodia

**Year 2
Quarterly Report
April-June 2012**

July 30, 2012

Quarterly Overview

Reporting Country	Cambodia
Lead Partner	JATA
Collaborating Partners	FHI, KNCV, MSH, WHO
Date Report Sent	
From	Jamie Tonsing
To	Chantha Chak
Reporting Period	April-June 2012

Technical Areas	% Completion
1. Universal and Early Access	63%
2. Laboratories	63%
3. Infection Control	75%
4. PMDT	50%
5. TB/HIV	75%
6. Health Systems Strengthening	75%
7. M&E, OR and Surveillance	50%
Overall work plan completion	64%

Most Significant Achievements

Public Private Mix (PPM) project showed marked improvement during this quarter. The proportion of referred TB suspects reporting to public health facilities increased from 67% in Q1 to 79% during the reporting period. Similarly, the number of TB cases diagnosed among referred suspects increased from 43 to 78 cases - an increase of 45% (more in section 4 and 7).

The joint TB CARE I and CENAT peer-review team visited three randomly selected ODs (Stong, Bakan, Sen Monorom) to assess overall performance of the TB programme, including through data verification and patient interviews. Overall score for consistency between the OD TB register and the OD quarterly report was 100% for case-finding and 64% for treatment outcomes (low because of zero score in 1 of the 3 ODs). Overall score for completeness of the OD register for case-finding was 96%, while the score for timeliness of starting TB treatment (within one week of diagnosis) was 68%. (more in section 4 and 7).

Website development for the NTP was completed and launched on 29 June 2012- www.cenat.gov.kh. CENAT organized a small function to mark the occasion which was attended by most NTP partners. TB CARE I has handed over management of the website to CENAT but will continue to contribute to articles and entries to maintain an updated content.

During this quarter, Xpert/MTB RIF assay was used for testing 849 samples. 29% (245/849) tested MTB positive including 25 samples which were both MTB and RIF positive. The error rate was 5.1% , down from 7.4% error rate when the test was first used for active case finding in prisons.

Overall work plan implementation status

Work plan implementation has caught up during this quarter - increase from 43% completion rate in the previous quarter to 64% in this reporting quarter. Modification request to use anticipated savings from APA2 has been submitted to USAID Mission and PMU.

Technical and administrative challenges

Delays in activities related to e-TB manager, operations research, and active case finding for MDR-TB. Challenges in meeting targets for quality of chest x-rays (1.1.4) and turn around time for sputum smear results (1.3.2) as described further in the technical outcome and activity plan report sections.

In-country Global Fund status and update

Global Fund Round 7 Phase II grants was finally disbursed in May 2012 after a delay of around 1 year due to prolonged negotiations for phase II.

Quarterly Technical Outcome Report

Technical Area 1. Universal and Early Access								
Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
1.1 Increased demand for and use of high quality TB services and improve the satisfaction with TB services provided (Population/Patient Centered Approach)	1.1.3 Patients' Charter is implemented Indicator Value: Score (0-3) based on definition	0	2010	2	2012	2	Baseline study and implementation completed using two tools (Quote TB Light and Patients' Charter). Health centres were provided feedback on patient's ranking of the quality of TB care dimensions and their performance from the patient's perspective. Once data analysis is completed, the team will re-visit the health centres to provide comprehensive feedback on	An end line survey is planned in APA3 to assess the impact of using the tools in improving the quality of TB care
	1.1.4 Referral hospitals in project sites judged to have read chest X-rays correctly by the expert cross reader (85% correct results)	NA (new indicator)	2010	85%	2012	81.5%	Performance in x-ray reading for this quarter is 81.5%, down from 87% in the past quarter.	Supervision and on the job trainings by expert cross readers will be strengthened during the next quarter to achieve 85% as an annual target (Expert cross readers from CENAT were busy with the TBREACH active case finding project in the past
	1.1.5 Updated manual of the NTP is developed Description: The current NTP manual will be revised to include recent WHO guidelines including 2009 treatment guidelines, PMDT, Childhood TB, 3Is etc.,	No	2011	Yes	2012	No	The comprehensive NTP manual is scheduled to be drafted in September 2012, using findings of Joint Program Review in August 2012. (PMDT component	Not applicable because scheduled to be done in September 2012.

1.2 Increased quality of TB services delivered among all care providers (Supply)	1.2.5 TB patients reported in prisons among the total number of prisoners in TBCARE areas (number & %) Description: This indicator measures the performance of the prisons program with regard to case finding activities	101/3453 (3%)	2010	> 4%	2012	NA	Annual cumulative target so not yet due for reporting. Seven TB patients diagnosed and started on treatment during this quarter.	Common issues raised and agreed upon solutions include: (i) prison health post staff to be more involved in identifying TB suspects and supervising sputum collection, instead of relying solely on the prison cell leaders; (ii) regular supervision by health centre and OD supervisors; (iii) improve coordination among staff in the prisons for proper discharge planning and screening of all new entries to the prison.
1.3 Reduced patient and service delivery delays (Timing)	1.3.2 Provider Delay Description: Number of days from sputum collection at Health Centres to receipt of lab results	NA (not reported)	2010	<5 days	2012	8 days	<p>The number of sputum smear tests registered in the system by health centre staff increased from 471 tests in the previous quarter to 641 tests during this quarter, while lab staff provided results using the system for 85% of tests compared to 74% in the previous quarter.</p> <p>During the reporting period, TB CARE I team worked with InSTEDD (system developer) to successfully transfer the web based application from</p>	<p>Though the target of 5 days is not achieved, turn around time of 8 days during this quarter is a significant improvement from the 15 days duration in the first 3 months (Dec-Feb).</p> <p>An option to further shorten the time for smear results is to support bi-weekly trips for health centres to deliver sputum smears to the TB labs (currently, NTP supports one trip per week)</p>

Technical Area 2. Laboratories

Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
2.1 Ensured capacity, availability and quality of laboratory testing in country needed to support the diagnosis and monitoring of TB patients	2.1.3 TB laboratories participating in smear microscopy EQA program performing with over 95% correct results in TB CARE areas (number & %) Description: This indicator measures the quality of smear microscopy services	60/79 (76%)	2010	85%	2012	84% (70/83)	84% (70/83) of the TB labs had over 95% correct results during this quarter, compared to 72% (60/83) of labs in the previous quarter.	

2.2 Ensured the availability and quality of technical assistance and services	2.2.1 Technical assistance visits from a SRL through a formal link of memorandum of agreement	Yes (outside TBCARE)	2010	Yes	2012	No	Planned for next quarter	
2.3 Ensured optimal use of new approaches to the laboratory confirmation of TB and incorporation in national strategic lab plans	2.3.1 New technologies have been introduced Indicator Value: Number for each technique below by Central, Provincial, district and Peripheral levels 1. GeneXpert (3) 2. LED microscopy (12)	2 GeneXpert and 12 LED planned	2011	3 GeneXpert and 12 LED (cumulative from Y1)		2 GeneXpert and 12 LED microscopes	Procurement order for the third GeneXpert unit already placed, expected to be delivered and use in the next quarter.	

Technical Area		3. Infection Control						
Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
3.2 Scaled-up implementation of TB-IC strategies	3.2.1 "TB IC core package" strategy has been adapted and adopted in TB CARE TB-IC project areas Indicator Value: Score (0-3) based definition.	1	2010	2	2012	2	Implementation of the branded TB-IC communication strategy "SAKSIT" is progressing well. SAKSIT communication tools containing key messages (flipcharts, posters, X stand, masks, logo and hand washing stickers) were designed and printed. Training curriculum was developed, NTP staff and C-DOTS volunteers trained to use the tools. In addition, a checklist to be used for assessing the effectiveness of SAKSIT with regard to changes in knowledge, attitudes and practices related to TB infection control was designed.	Target already achieved.





Technical Area 4. PMDT								
Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
4.1 Improved treatment success of MDR	4.1.2 MDR TB patients who are still on treatment and have a sputum culture conversion 6 months after starting MDR-TB treatment Indicator Value: Percent Numerator: Number of MDR TB patients in a cohort who are still on treatment and had culture conversion latest at month 6 (had 2 negative sputum cultures taken one month apart and remained culture negative since) Denominator: Total number of MDR patients who started treatment in the cohort.	NA (not reported)	2010	65%	2012	78%	Target achieved this quarter. Culture conversion reports available for 9 of 11 MDR-TB patients enrolled in Q1-Q2,2011 (MSF-F yet to submit reports to NTP for the 2 patients followed up by them). 78% (7/9) of the patients were confirmed to have sputum culture conversion at month 6.	Recording and Reporting system for PMDT needs further improvement. In Q2, 2012, standardised DR-TB treatment registers were finalised and distributed for use including by the MSF-F project.




Technical Area 5. TB/HIV								
Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
5.2 Improved diagnosis of TB/HIV co-infection	5.2.2 TB patients with known HIV status Indicator Value: Percent Numerator: Total number of all TB patients registered over a given time period who were tested for HIV (after giving consent) during their TB treatment Denominator: Total number of TB patients registered over the same given time period.	77%	2010	79%	2012	81.5%	Target already reached. In 2011, 84% of the TB patients (excluding those who already had HIV testing) were referred for HIV testing and 97% of those who were referred were tested for HIV at VCCT. Thus, 81.5% of TB patients were tested for HIV.	




Technical Area 6. Health Systems Strengthening								
Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&E) formed integral part of national plans, strategies and service delivery of these components	6.2.4 Sound technical proposal developed and submitted for Global Fund Round 11 funding Description: TB CARE staff spend considerable time with the Global Fund process at the country level, serving on panels to identify priorities and conduct gap analysis, reviewing expression of interests from potential sub-recipients and in the proposal development itself. This will continue for the upcoming round 11 application	Submitted , not approved	2010	Submitted and approved	2012	Not applicable	This indicator is no longer applicable as the Global Fund R11 was cancelled. However, TB CARE I recruited a consultant, Dr Léopold Blanc, who drafted a sustainability plan for NTP considering current and projected funding scenario. It is planned to use this document for mobilising additional resources for the TB programme.	




Technical Area		7. M&E, OR and Surveillance						
Expected Outcomes	Outcome Indicators	Baseline		Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
		Data	Year	Data	Year	Y1		
7.1 Strengthened TB surveillance	7.1.1 An electronic recording and reporting system for routine surveillance exists at national and/or sub-national levels	No	2010	Yes	2012	NA	e-TB manager pilots in three sites planned for next quarter	
	7.1.4 Joint Program Review of the NTP is conducted	No	2010	Yes	2012	NA	Not applicable	This is scheduled for August 2012.
7.2 Improved capacity of NTPs to analyze and use quality data for management of the TB program	7.2.3 A data quality audit at central level has been conducted within the last 6 months Indicator Value: Yes/No	No	2010	Yes	2012	Yes	Three data quality audits conducted during the quarter. Details in Sheet 4, Activity 7.2.1	
7.3 Improved capacity of NTPs to perform operational research	7.3.1 OR studies completed and results incorporated into national policy/guidelines Indicator Value: Number (of OR studies and instances reported separately)	NA	2010	2	2012	NA	Due next quarter but unlikely to be completed within APA2.	Delays partly because the studies are planned in the context of capacity building for NTP staff and partners who are engaged with other tasks, and the need for collaboration among team members working in different



Quarterly Activity Plan Report




1. Universal and Early Access			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	
1.1 Increased demand for and use of high quality TB services and improve the satisfaction with TB services provided (Population/ Patient Centered Approach)	1.1.1	ACF targeting high risk groups	WHO	41,855	 25%	Sep	2012	TB CARE I is supporting efforts of the national TB program (NTP) to improve MDR-TB case finding. The protocol for active case finding for MDR-TB among high MDR-TB risk groups was drafted and submitted to the NTP Director in June 2012. Hence, the NTP may be able to start implementing this from August 2012.
	1.1.2	Patient Centered Care	WHO	54,305	 75%	Sep	2012	Base line survey and intervention in two operational districts (ODs) and four health centres of Kampong Speu Province. As a part of the baseline survey, Quote TB light tool was used to measure the performance of health services and rank the importance quality of TB care dimensions from the patient's perspective. Health centres were given feedback on the team's observations during the use of the tool and patient rights and responsibilities as enumerated in the Patients Charter. Once data analysis is completed, the team will re-visit the health centres to provide comprehensive feedback on the findings and ways to improve quality of TB services. An end line survey is planned in APA3 to assess improvement in quality of TB care as a result of using these tools.
	1.1.3	NTP Manual	WHO	12,351	 0%	Sep	2012	This is scheduled to be done in September 2012, just after the Joint Program Review planned for August 2012.
	1.1.4	Childhood TB	JATA	101,913	 75%	Sep	2012	During this period, TB CARE I completed planned expansion to make services available for diagnosis and management of childhood TB in 17 ODs. During this quarter, 8,356 children were referred by community volunteers and health center staff to referral hospitals for further diagnostic work-up including physical examination, tuberculin skin tests and X-ray examinations. 16% (1,327/8357) of those referred were diagnosed with TB and referred back to the health centers for treatment.




	1.1.5	Diagnostic capacity improvement	JATA	128,466	 75%	Sep	2012	<p>TB CARE I works closely with CENAT/NTP to support and monitor the quality of smear negative TB diagnosis in 11 provinces. This quarter, 1,033 TB suspects were referred from health centers and communities to referral hospitals for further evaluation. Of those, 39% (403/1033) were diagnosed as smear negative TB. The joint TB CARE I/CENAT supervisory team visited all referral hospitals (RH) in the project site to review diagnosis made by RH physicians.</p> <p>The agreement rate between RH doctors and CENAT expert in interpretation of chest x-rays was 81.5% for this quarter. Assessments of the quality of smears prepared by the health centres showed the following results in this quarter: good quality sputum: 77%; good smear size: 81.3%; good smear thickness: 58.2%; and good smear evenness: 47.4%.</p>
	1.1.6	Digital X-ray	JATA	82,031	 50%	Sep	2012	One digital x-ray has been procured and is being used at CENAT hospital. During this reporting period, 206 patients were examined using the digital x-ray machine. Procurement order for the second machine has been placed.
	1.1.7	Quality Improvement	FHI	42,449	 75%	Sep	2012	Quality Improvement (QI) program to improve referrals of TB suspects through community DOTS watchers (DW) and private providers (PP) started in five health centres in Kg Cham in Oct 2011. The pilot continued to demonstrate sustained improvements: referred TB suspects reporting to the health centres (HC) increased from 608 in the previous quarter to 680 this quarter, while the number of TB (all forms) diagnosed increased from 93 to 113 cases. Key changes that contributed to the success include: (i) joint review of HC performance by all stakeholders (HC staff, supervisors, DW and PPs, and village commune councils) on a regular basis; (ii) mechanism to compare notes on referrals and arrivals with systematic follow up of those who did not report to the HC; (iii) support for transportation cost of TB suspects, when needed, through the village commune council.
Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date









1.2 Increased quality of TB services delivered among all care providers (Supply)	1.2.1	Prisons	FHI	89,635	 75%	Sep	2012	TB CARE I supports provision of TB/HIV services in 7 prisons. During the quarter, four quarterly coordination meetings were held in Koh Kong (24 April), Preah Sihanouk (28 May) Kg Speu (30 May) and Takeo provinces (13 June). 84 participants (11 F) including local authorities and representatives from the General Department of Prisons (GDP), TB and HIV programmes attended these meetings. Common issues raised and agreed upon solutions include: (i) the need for prison health post staff to be more involved in identifying TB suspects and supervising sputum collection, instead of relying solely on the prison cell leaders; (ii) the need for regular supervision of the prison health post by health centre and OD supervisors; (iii) the need to improve coordination among staff in the prisons for proper discharge planning and screening of all new entries to the prison. Seven TB patients were diagnosed and started on treatment during this reporting period.
	1.2.2	PPM - Implementation	FHI	88,717	 75%	Sep	2012	PPM project showed marked improvement during this quarter. The proportion of referred TB suspects reporting to public health facilities increased from 67% in Q1 to 79% during this quarter. Similarly, the number of TB diagnosed among referred suspects increased from 43 to 78 cases - an increase of 45% (see charts in section 7). During the quarter, series of PPM trainings were held in Phnom Penh (4-7 June), Takmao OD (23-26 May), and Soth Nikum OD (5-6 May). 193 (53 females) public and private health providers participated in the training. In addition, quarterly coordination meetings were also organized in Phnom Penh (10 & 23 April), Kandal (4 May & 19 June), Kg Speu (8 May), Kg Cham (11 May), Battambang (20-21 June) and Takeo (28-29 June). Key challenges identified include lack of motivation of some private providers (PP) and health centre staff, inadequate time of PPs to counsel and complete the referral forms, feedback on referrals not provided to PPs. It was agreed to strengthen supervision, hold regular coordination meetings and simplify and shorten the referral forms.
	1.2.3	PPM - Advocacy (PAC)	FHI	35,760	 75%	Sep	2012	During the quarter, Pharmacist Association of Cambodia (PAC), participated in trainings and quarterly meetings organized by the Municipal Health Department of Phnom Penh. PAC also actively participated in revision of the PPM referral forms to make them shorter. The forms will be finalized, printed and introduced by next quarter.
Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date



1.3 Reduced patient and service delivery delays (Timing)	1.3.1	IT-SMS project (InSTEDD)	FHI	20,761	 75%	Sep	2012	During the reporting period, TB CARE I team worked with InSTEDD (system developer) to successfully transfer the web based application from InSTEDD's server to the CENAT/FHI 360 cloud server: http://tblab.cenat.gov.kh/accounts/sign_in . TB CARE I is also working with the InSTEDD to explore how to migrate the remaining server- TB SMS server. InSTEDD will continue to provide technical assistance to maintain the web based application and in development of new application as needed.
	1.3.2	IT-SMS project (FHI)	FHI	30,293	 75%	Sep	2012	Since Dec 2011, 15 health facilities are using the web-based SMS system to relay results of sputum smear tests. Increasing use/ uptake of the SMS system seems to indicate acceptability and feasibility of the pilot project - the number of sputum smear tests registered in the system by health centre staff increased from 471 tests in the previous quarter to 641 tests during this quarter, while lab staff provided results using the system for 85% of tests compared to 74% in the previous quarter. The average turn around time for delivering test result was 8 days (see chart in section 7). Quarterly meetings were held in Kg Cham OD (31 May) and Chamkar Leu OD (01 June) to review the achievement, challenges, exchange experiences and standardize practices at all sites. In addition, 14 staff (1 Female) from the two new TB labs and affiliated health centres were trained to use the SMS system on 25 June at Kampong Cham.
						 63%		

2. Laboratories			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	
2.1 Ensured capacity, availability and quality of laboratory testing in	2.1.1	EQA-sputum microscopy	JATA	58,861	 75%	Sep	2012	TB CARE I continues to support external quality assurance (EQA) for sputum smear microscopy, covering 84 TB laboratories in 9 provinces. Monitoring results for this quarter showed improvement in EQA performance. Out of 84 TB labs, 83 participated in the EQA process. 84% (70/83) of the TB labs had over 95% correct results during this quarter, compared to 72% (60/83) of labs in the previous quarter.
Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date
2.2 Ensured the availability and quality of technical	2.2.1	Technical assistance - lab aspects	JATA	17,857	 50%	Sep	2012	Visit from the SRL is planned next quarter. TB CARE I lab officer continues to work closely with CENAT/NTP staff and provides technical assistance for TB CARE I supported lab activities including EQA for sputum microscopy, GeneXpert pilot, and LED fluorescence microscopy.




Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date
2.3 Ensured optimal use of new approaches to the laboratory confirmation of TB and incorporation in national strategic lab plans	2.3.1	GeneXpert pilot	JATA	98,780	 50%	Sep	2012	The two GeneXpert supported by TB CARE I are placed at the national reference lab at CENAT and Battambang referral hospital. During this quarter, Xpert/MTB RIF assay was used for testing 849 samples. 29% (245/849) tested MTB positive including 25 samples which were both MTB and RIF positive. The error rate was 5.1% , down from 7.4% error rate when the test was first used for active case finding in prisons.
	2.3.2	LED microscopy	JATA	57,594	 75%	Sep	2012	TB CARE I continues to support the use of LED fluorescence microscopy in 14 high volume TB laboratories. Monthly supervisory visits are made to all labs, totaling 12 visits during the quarter. In general, lab technicians have provided positive feedback in using LED fluorescence microscopes because it is clearer and faster than the conventional microscopes, which is helpful when they have a lot of smear slides to read. One LED microscope was found to be broken and sent for repair, one other lab was instructed to improve on the staining procedures and store slides in order.
					 63%			






3. Infection Control			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	
3.2 Scaled-up implementation of TB-IC strategies	3.2.1	TB-IC: Implementation	FHI	19,420	 75%	Sep	2012	During the quarter the TB-IC checklist was developed aimed at identifying and minimizing the risk of TB transmission at the health centre level, by observation of triage, waiting areas, consultation rooms, seating arrangement, cough hygiene, sputum collection area, and disposal of sputum samples. The checklist was tested at two HCs in Kampong Cham province. The checklist will be used from the next quarter by supervisors as part of overall supportive supervision to the health centres
	3.2.2	TB-IC: Communications strategy	FHI	20,784	 75%	Sep	2012	SAKSIT communication tools containing key messages including flipchart, poster, X stand, logo and hand washing sticker, and mask were designed and printed. Additionally, the SAKSIT training curriculum for NTP staff and C-DOTS volunteers was developed. A training of trainers for using SAKSIT tools was conducted on 21-22 June 2012 at Kampong Cham OD for 14 participants (all males) from CENAT, provincial and district level NTP staff. In addition, a checklist for assessing awareness and practices related to TB infection control in the community was developed. The checklist will be used by health center staff or supervisors to regularly measure the effectiveness of SAKSIT with regard to changes in knowledge, attitudes and practices at the community level.
					 75%			







4. PMDT			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	
4.1 Improved treatment success of MDR	4.1.1	PMDT- joint supervision (TB CARE & CENAT)	WHO	22,374	 75%	Sep	2012	Joint supervision of WHO/TB CARE, CENAT and Cambodia Health Committee (CHC) is being done regularly to at least 7 MDR-TB treatment sites, 15 provinces and 20 drug resistant-TB patients' homes every quarter.
	4.1.2	PMDT- Sputum transportation	WHO	31,640	 25%	Sep	2012	Only about 6% of eligible cases were screened using the sputum transportation system; most of the other eligible cases were screened using other methods (e.g. using supervisory visits and mobile screening conducted by CENAT team).
	4.1.3	PMDT-ToT	WHO	17,148	 100%	Dec	2012	Facilitated by Dr Mamel Quelapio from WHO/WPRO, clinical training on PMDT was organised from 12-16 December 2011 at Phnom Penh. 67 participants (19 female) from MDR-TB treatment sites in the country attended the training.
	4.1.4	PMDT - supervision by CHC	WHO	14,883	 50%	Sep	2012	Every month, MDR-TB program manager and clinicians of CHC visit at least 3 treatment sites and 10 patients in both hospital and community. In addition, field nurse monitors and pharmacists of CHC visit at least 115 patients' homes every month.
	4.1.5	PMDT- enablers during treatment (CHC)	WHO	123,816	 50%	Sep	2012	Around 105 MDRTB patients get monthly support (enablers) for the DR-TB treatment and travel to hospitals for periodic follow-up.
	4.1.6	PMDT- ancillary drugs and supplies (CHC)	WHO	18,916	 0%	Sep	2012	This is under process using WHO procurement processes.
	4.1.7	PMDT - Staffing & Operations cost	WHO	42,471	 50%	Sep	2012	Ongoing support for staffing and operations of Cambodia Health Committee, the local NGO providing ongoing support for PMDT
					 50%			




5. TB/HIV			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	
5.2 Improved diagnosis of TB/HIV co-	5.2.1	HIV testing of TB patients	WHO	45,200	 75%	Sep	2012	In 2011, 84% of the TB patients (excluding those who already had HIV testing) were referred for HIV testing and 97% of those who were referred were tested for HIV at VCCT. Thus, 81.5% of TB patients were tested for HIV.
					 75%			

6. Health Systems Strengthening			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	

Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date
6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&E) formed integral part of national plans, strategies and service	6.2.1	NTP partner coordination	All	600	 75%	Sep	2013	TB CARE I team participated in the Inter-agency Coordination Committee (ICC) meeting on 4 April and 7 June at CENAT, Phnom Penh to discuss vulnerability analysis and sustainability plan for the NTP given uncertainty in funding for the NTP once the current Global Fund grant ends in March 2012. TB CARE I also participated in ongoing regular meetings of the laboratory TWG (31 May) and MDR-TB TWG (15 June) at CENAT, Phnom Penh.
	6.2.2	Resource Mobilization	All		 75%	Sep	2012	FHI 360/TB CARE I recruited a consultant, Dr Léopold Blanc, who visited Cambodia from 28 May-8 June 2012. Dr Blanc met and consulted with senior government officials including the Minister and Secretary of Health, potential and existing donors like USAID, AusAID, KOICA, as well as NGO partners to draft a sustainability plan for NTP to deliver essential TB services considering current and projected funding scenario. It is planned to have this document reviewed and endorsed during the Joint Program Review in August 2012 and thereafter to use it as a reference for mobilising additional resources for the TB programme.
					 75%			

7. M&E, OR and Surveillance			Activity Leader	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
Outcome	Activity #	Activity				Month	Year	
7.1 Strengthened TB surveillance	7.1.1	Joint NTP review	WHO	41,189	 0%	Aug	2012	This is scheduled for 2-15 August 2012
	7.1.2	Drug resistance surveillance	JATA	18,000	 50%	Sep	2012	This quarter, 25 patients tested with Xpert were identified as MTB positive and Rifampicin resistance. All patients were started on MDR-TB empirical regimen while awaiting results of culture and drug susceptibility test to confirm MDR-TB diagnosis
	7.1.3	Begin implementation of e-TB manager for PMDT/Second Line Drugs (Year 1 of 2)	MSH	49,894	 100%	Jan	2012	Dr Luis Gustavo do Valle Bastos from MSH/TB CARE I visited Cambodia from 16-20 Jan 2012 to formally initiate e-TB manager tool customization process for Cambodia. a) Key changes required to tailor the e-TB manager tool to meet the needs of the MDR-TB guidelines of the country were identified and discussed with the CENAT team during the visit. b) Customization of the Cambodia e-TB manager with their specific request identified during the above mentioned visit is ongoing and planned to be completed in May 2012.
	7.1.4	Test initial e-TBM version to identify potential bugs and need for further adjustments	MSH	45,314	 75%	Jul	2012	This is being conducted remotely by the MSH team based in the US and Brazil in cooperation with the WHO staff for MDR-TB (Khan Sokhan) in Cambodia. The activity was completed in June 2012. It is now waiting testing and approval by the eTB Manager Technical Working Group (TWG) before pilot starts in August 2012
	7.1.5	On-site pilot w/ selected TB units	MSH	56,819	 0%	Dec	2012	This activity is delayed and will now start in August 2012 and consists of five steps: a) e-TB Manager implementers in-country training for health workers from pilot units & TWG members. This activity was postponed to August 2012 b) Pilot implementation plan developed and approved by the TWG (timeline, matrix of responsibilities, flows/procedures, infrastructure), and staff orientation in each pilot site. Run from late August to Jan 2013. c) Pilot start-up: planned for three MDR-TB treatment sites from August to December 2012. Quarterly assessments are planned to provide feedback for MSH team and TWG. d) Final adjustments and further customizations performed; Cambodia eTB Manager implementation version approved by TWG; Training of trainers sessions to selected staff countrywide conducted; Training on IT issues (country server, system structure/operation, system maintenance/corrections) conducted; and Final implementation (roll-out) plan developed and approved by TWG. This is expected to be completed by March 2013. e) Expansion of the Cambodia eTB Manager implementation version to all 11 MDR-TB treatment sites countrywide from April 2013.

Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date
7.2 Improved capacity of NTPs to analyze and use quality data for management of the TB program	7.2.1	NTP peer-review	FHI	9,467	 75%	Sep	2012	The joint FHI 360/TB CARE I and CENAT peer-review team visited three randomly selected ODs (Stong, Bakan, Sen Monorom) to assess overall performance of the TB programme, including through data verification and patient interviews. Summary of the findings by ODs is presented in section 7. Overall score for consistency between the OD TB register and the OD quarterly report was 100% for case-finding and 64% for treatment outcomes (low because on 0 score in 1 of the 3 OD). Overall score for completeness of the OD register for case-finding was 96%, while the score for timeliness of starting TB treatment was 68%. A debriefing meeting is organised on the last day of the review to provide feedback to local authorities and agree on a set of recommendations for improvement.
	7.2.2	Website development	FHI	9,613	 100%	Sep	2012	Website development for the NTP was completed and launched on 29 June 2012- www.cenat.gov.kh . CENAT organized a small function to mark the occasion which was attended by most NTP partners. TB CARE I has handed over management of the website to CENAT but will continue to contribute to articles and entries to maintain an updated content.
Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up-to-date
7.3 Improved capacity of NTPs to perform operational research	7.3.1	OR workshop: develop protocol and implementation plans	KNCV	32,879	 100%	Feb	2012	TB CARE I organised Operational Research (OR) training course & research proposal development from 13-17 February 2012 at Phnom Penh. Dr Ellen Mitchell and Dr Jacques Van den Broek from KNCV, and Dr Nobuyuki Nishikiori from WHO regional office were the course faculty members. 23 participants (6 females) from CENAT and NGOs supporting the NTP, participated in the training and identified four OR topics. Local mentors for each of the four team were identified to lead and guide the teams in finalizing the proposal and during implementation.
	7.3.2	OR workshop: report writing	KNCV	39,170	 0%	Sep	2012	Not yet due for implementation
	7.3.3	OR: operational costs including remote TA	KNCV	74,783	 50%	Sep	2012	Dr Ellen Mitchell and Dr Jacques Van den Broek from KNCV are in touch with students of the OR course, via Skype call and emails, to provide guidance and feedback as needed
	7.3.4	OR on PPM	FHI	25,720	 50%	Sep	2012	One of the four topics identified during the OR workshop (7.3.1) relates to PPM - to assess the effect of enhanced referral strategy for high risk groups through private and community health care providers. The proposed research will be jointly conducted by a team from FHI 360, WHO, HEAD and RHAC (local NGOs) with assistance from the local and KNCV mentor. During the quarter, the OR protocol was finalised and ethical approval sought and obtained. Field work will begin in July 2012.

	7.3.5	International travel	FHI	10,684	 0%	Sep	2012	Postponed since the Union World Conference on Lung Health is scheduled for November 2012
	7.3.6	OR: IPT in children	JATA	16,235	 50%	Sep	2012	TBCARE I in collaboration with CENAT/NTP launched the pilot implementation of IPT for childhood TB on 6 June 2012 in Kong Pisey OD (Kg Speu province). 53 staff (10 females) from provincial health department, referral hospital and health centers attended the workshop. From now this OD starts implementing IPT. TB children contacts of smear positive who are aged less than 5 years old are screened for IPT. If they are healthy, they will be offered IPT for 6 months.
					 50%			

Quarterly MDR-TB Report

Country	Cambodia
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Period	APRIL-JUNE 2012
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MDR TB cases diagnosed and put on treatment in country

Quarter	Number of MDR cases diagnosed	Number of MDR cases put on treatment
Jan-Dec 2010	31	41
Jan-Sep 2011	31	47
Oct-Dec 2011	25	36
Total 2011	56	83
Jan-Mar 2012	29	37
Apr-Jun 2012	18	29
To date in 2012	47	66

Quarterly GeneXpert Report

Country	Cambodia	Period	April-June 2012
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Table 1: GeneXpert instruments and cartridges procured or planned by quarter

	Procured			# still planned for procurement in APA 2	Month, Year procurement planned (i.e. April 2012)
	Jan-Dec 2011	Jan-Jun 2012	Cumulative Total		
# GeneXpert Instruments	2			1	Jul-12
# Cartridges	2000			3000	Aug-12

Table 2: Cumulative List of GeneXpert Instruments Procured to Date or Planned in the Next Quarter

Already procured or still planned? (i.e. Write "Procured" or "Planned")	Instrument	# of Modules (1, 2, 4, or 16)	Location(s) (facility name & city/ province or TBD)	USG Funding Source (e.g., PEPFAR COP FYxx, USAID) ¹	Partner/ Implementing Organization; Additional Comments
Procured	1	4	CENAT, Phnom	USAID	JATA/NTP Cambodia
Procured	2	4	Battambang	USAID	JATA/NTP Cambodia
Planned	3	4	TBD	USAID	JATA/NTP Cambodia
	4				
	5				
	6				
	7				
	8				

¹ Differentiating between PEPFAR and USAID-funded is important. If it is PEPFAR funded, specify the fiscal year (i.e. FY2011). Add rows if there are more than 8 instruments in total.

Table 3: Cumulative Xpert MTB/RIF Cartridges Procured to Date or Planned for Next Quarter

Already procured or still planned? (i.e. Write "Procured" or "Planned")	Order #	# of Cartridges*	Location(s) (facility name and city/ province or TBD)	USG Funding Source (e.g., PEPFAR COP FYxx, USAID) ¹	Comments
Procured	1	2000	CENAT/NTP	USAID	
Planned	2	3000	CENAT/NTP	USAID	
	3				
	4				
	5				

*There are 10 cartridges per kit, but we need the total # of **cartridges** (not kits)
Add an additional row for every procurement order of cartridges

Any additional information/clarifications to the above (optional)

Procurement order for the third GeneXpert instrument and cartridges already placed with the local distributor .

Please provide a brief description of any significant problems encountered in use of the GeneXpert machine(s) & Xpert MTB/RIF cartridges

During this quarter , Xpert/MTB RIF assay was used for testing 849 samples. 29% (245/849) tested MTB positive including 25 samples which were both MTB and RIF positive. The error rate was 5.1% , down from 7.4% error rate when the test was first used for active case finding in prisons.

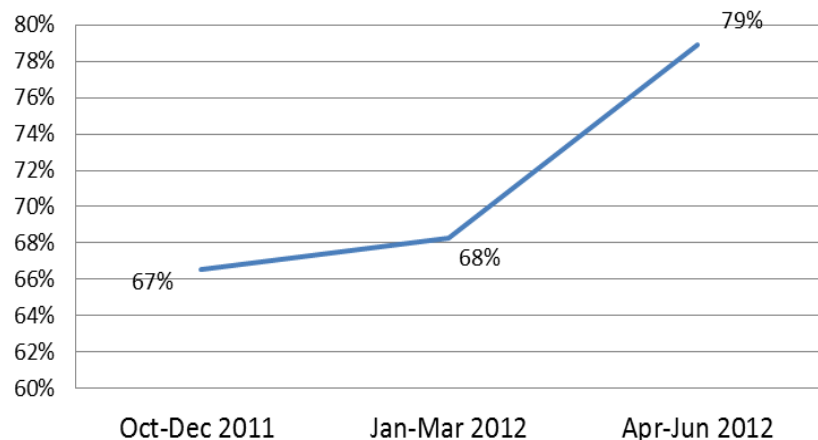
Laboratory staff identified hardware errors (ERROR 1001 and ERROR 1002) in one module of the GeneXpert instrument and reported it to the local supplier and technical support unit at Cepheid, the manufacturer. Since the instrument is still under warranty, Cepheid is

Please describe technical assistance or evaluation of implementation activities performed and planned.

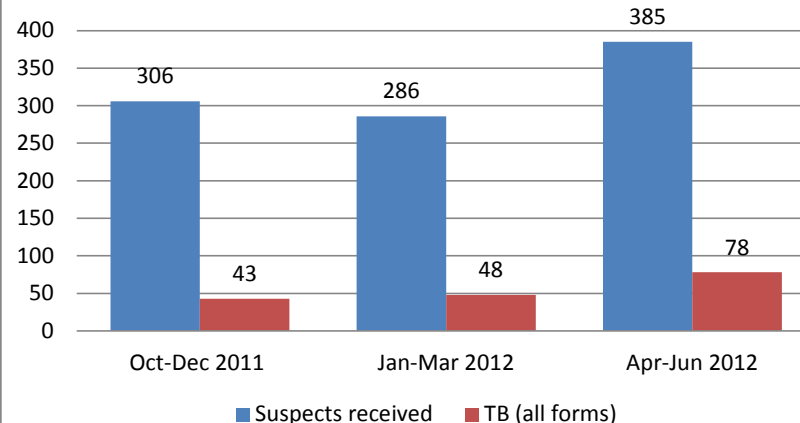
Other than the technical assistance (TA) reported in Quarter 2, no other TA is planned for this year.

Quarterly Photos (as well as tables, charts and other relevant materials)

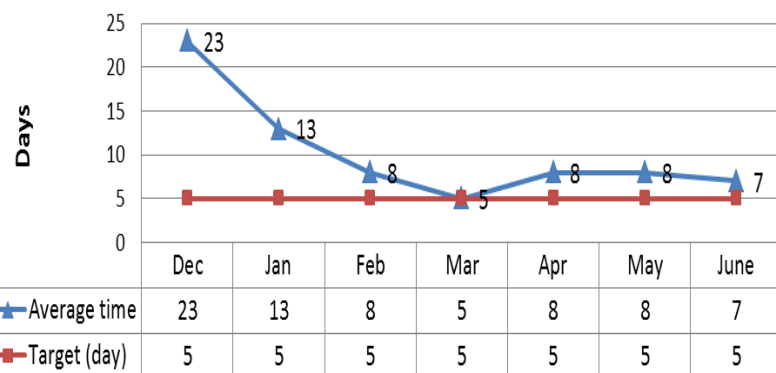
PPM (1.2.2): Proportion of referred TB suspects reporting to public health facilities (%)



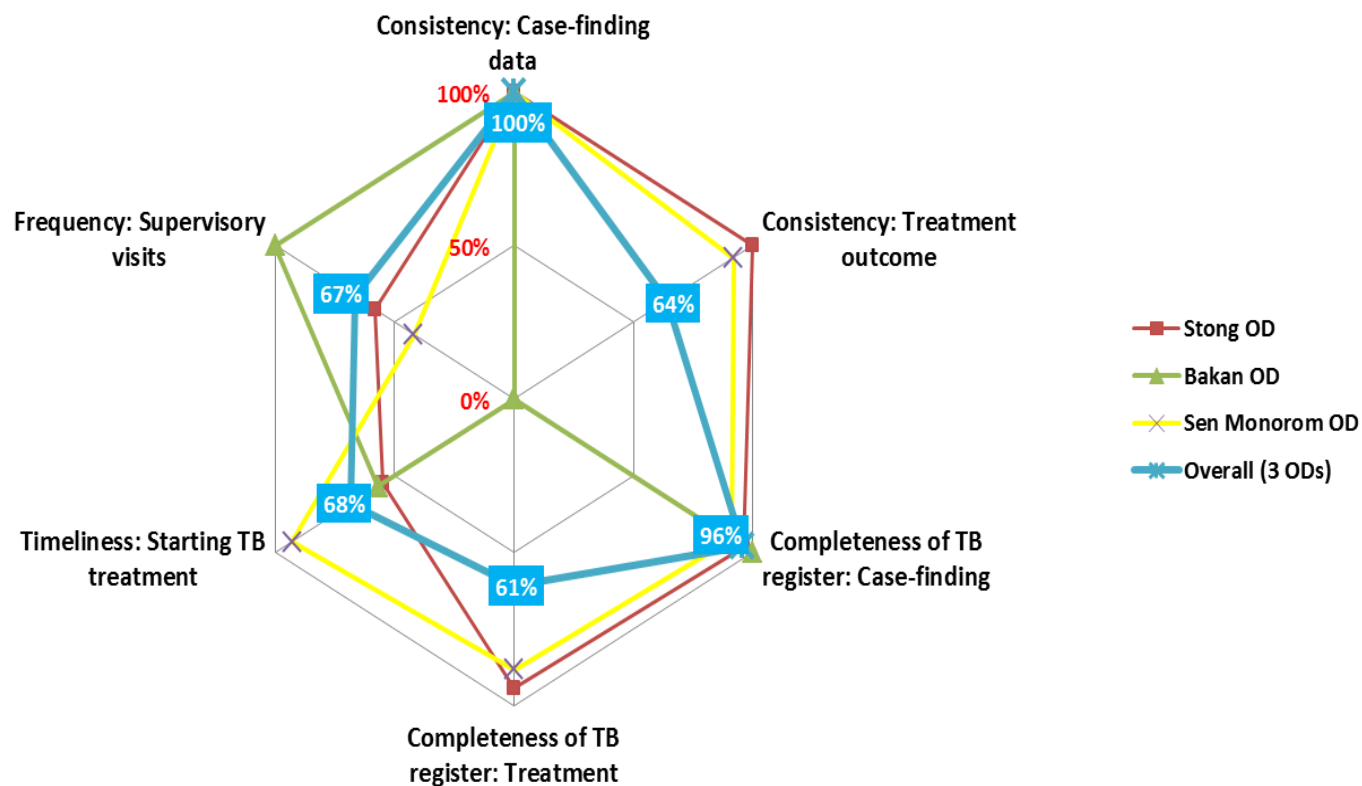
PPM (1.2.2): TB cases among suspects reporting to health facilities (numbers)



SMS project (Activity 1.3.2): Turn around time for sputum smear test results in project sites



7.2.1: Findings of peer-review team, 3 ODs



Inventory List of Equipment - TB CARE I



USAID
FROM THE AMERICAN PEOPLE

TB CARE I

Organization:	TB CARE I
Country:	Cambodia
Reporting period:	April-June 2012
Year:	APA 2

Description (1)	ID numbers (2)	Acquisition date (3)	Acquisition cost (4)	V.A.T (5)	Location (6)	Condition (7)	Disposition date (8)	Title held by (9)	Insurance Policy #
Ford Ranger Pick Up Truck 2011 Year Model, LHD, 4x4, Double Cab, 2.5L Turbo Diesel Engine (TDCi) XL 5 seats, 5 speed Manual Transmission, Model Code: UF4JLAE	Engine No. WLAT1331443; Chassis No. MNCLSF1XBW97723	21-Dec-12	\$ 13,422.50	N/A	FHI 360, Phnom Penh	New	NA	NA	
		9-Apr-12	\$13,422.50						
			\$26,845.00						

(1) Description of equipment: transportation (vehicles), administration (computers, faxes), laboratory equipment or others

(2) Identification number (eg Manufacturer's serial number, model number, Federal stock number, national stock number)

(3) Date of invoice

(4) Total price including any sales tax paid. Use currency on invoice

(5) Note any sales tax charged

(6) Address

(7) Good/fair or bad

(8)+(9) Ultimate disposition data, (in the case of a vehicle) including date of disposal and sales price or the method used to determine current fair market value.

where a recipient compensated TB CARE I for its share. Attach supplementary info